

## THEORY OF KNOWLEDGE

In order to secure success for their candidates, schools are strongly recommended to ensure that this report is read in detail by all TOK teachers and the Diploma Programme Coordinator.

Teachers are also once again directed towards the IB Publication “Understanding Knowledge Issues” (on OCC) which provides clarification of the central concept of a ‘knowledge issue’. The term ‘knowledge issue’ is still in use for the remaining sessions on the extant TOK programme – namely for candidates in November 2013, May 2014 and November 2014.

The new TOK programme, starting with candidates for the May 2015 session, refers to ‘knowledge questions’ instead of ‘knowledge issues’, and further clarification on this change in terminology can be found in the new subject guide and teacher support material (also on OCC).

### Overall grade boundaries

Boundaries for this session were reduced by 1 point across the range.

<b>Grade:</b>	E	D	C	B	A
<b>Mark range:</b>	0-16	17-27	28-36	37-46	47-60

### Statistical summary

	May 2012	May 2013	% change
<b>English</b>	51,666	<b>55,594</b>	<b>7.60%</b>
<b>French</b>	545	<b>589</b>	<b>8.07%</b>
<b>Spanish</b>	3,551	<b>3,916</b>	<b>10.27%</b>
<b>German</b>	28	<b>39</b>	<b>39.28%</b>
<b>Chinese</b>	291	<b>349</b>	<b>19.93%</b>
<b>Total Candidates</b>	56,081	<b>60,487</b>	<b>7.85%</b>

## Section 1: Essays

### Component grade boundaries

Essay grade boundaries for this session were reduced by 1 point across the range, and this is the source of the change in the overall boundaries for this session. Some important points of clarification on this matter follow in the section below entitled 'general comments'.

<b>Grade:</b>	E	D	C	B	A
<b>Mark range:</b>	0-8	9-15	16-21	22-28	29-40

### Examiners

Thanks are extended to 285 examiners who assessed TOK essays this session – whose individual contributions form the basis for this part of the subject report. Many of these examiners are quoted directly in the pages that follow. The comments in a document such as this tend to focus on weaknesses of assessed work, but the successes that are observed each session always deserve acknowledgement. One assessor described his reactions to his examining experience this session as follows: “it is exciting to see the finesse and insight with which some candidates explore such sophisticated concepts as certainty, paradox and perspectives – it gives one optimism for future generations”. Teachers who wish to become examiners can visit <http://www.ibo.org/informationfor/examiners/> for more information (note that teachers must have two years experience of teaching TOK before examining). It is often the case that teachers find examining helpful both in terms of their own understanding of the programme and for the insight afforded with respect to the strengths and weaknesses of their own candidates.

### General comments

Many examiners judged the standard of essay work to be disappointing this session – recorded with comments such as:

- “There were a lot of poor papers written this session.”
- “Overall, these were the weakest papers I've assessed in ten years.”
- “I was 'wowed' far less frequently than I would have liked.”
- “I felt that the essays were much weaker this year than last year. This was largely because of candidates' not addressing the titles as prescribed.”

The senior assessment team has considered the various factors that may have had a part to play in this development, as below.

There have been a number of interventions to the processes of writing and assessing TOK essays that have taken effect over the last year – including:

- the reduction of each set of prescribed titles from 10 titles to 6
- the production of a different set of titles for each examination session
- the new release dates for each set 6 months in advance of the submission deadline.

These changes were introduced as a coherent package designed:

- to create equity for candidates from May and November sessions in terms of availability of titles (November candidates in particular as the titles were previously available to them for 6 months less than for May candidates)
- to create equity for schools from May and November sessions in terms of feedback (enabling a fresh subject report for each single session to be written and released to schools near the start of the school year – making obsolete the 6-month delay for November schools)
- to reduce the risk of setting titles of differing degrees of difficulty in the same set, and thus compromising assessment reliability
- to permit the use of title-specific examiner preparation notes that would firstly help examiners to appreciate the nature and range of appropriate responses to titles, and thereafter would be available to schools for the provision of guidance to following cohorts of candidates (NB the intention is to upload these title-specific notes to the OCC after the closing of that session)
- to emphasise that schools are expected to teach TOK as a complete and balanced course rather than as a sustained and narrow preparation for already-known assessment questions

These changes were flagged well in advance and stakeholders should have had time to adapt to them. However, it is possible that they could have had a slightly deleterious effect on the quality of essay work in this particular session due to failure of schools to make corresponding adjustments to their internal practices. In addition, there may have been aspects of some of the titles prescribed for this session that created additional hurdles for candidates beyond the usual intended challenges – these are discussed in the section below on specific titles.

Overall, these factors were judged to merit a slight lowering of the grade boundaries across the range. This adjustment applies to this session alone, and the senior team will undertake a boundary-setting exercise in each remaining session on the extant programme using the pre-M13 boundaries as the default. This process is intended as a check on the degree of difficulty of the titles set for each session.

Examiners who mark in both English and Spanish find a noticeable difference in the standard of the essays. Those in English are mostly of a better quality. The fact that many essays in English are written by non-native speakers, while in Spanish this is unusual, indicates that the difference in quality cannot be attributed to language proficiency. Rather it is the content of the essays that is of notably different standard, with too many Spanish-language essays

failing to show much understanding of the TOK course. Such schools appear to teach TOK “too philosophically” and consequently the essays produced by their candidates are very abstract, theoretical, or simply paraphrase the views of philosophers. There clearly needs to be greater focus on the nature of areas of knowledge and of ways of knowing and of the knowledge issues which may be linked to them. It often seems that there is little familiarity with the TOK subject guide itself as the definitive document for the programme. It is necessary for such schools to take TOK more seriously as at present they are not serving their candidates well.

All schools’ new to the Diploma Programme are asked to pay particular attention to what is required in a TOK essay. Schools which receive disappointing results in TOK are urged to invest in some of the opportunities for professional development that are available these days – especially face-to-face and online workshops led by experienced practitioners.

## Presentation of work

Once again, candidates and schools are asked to observe the following requests in order to assist with the assessment process:

- ensure that candidates use double spacing and a font size of 12
- use a ‘standard’ font such as Times New Roman, Calibri or Arial
- use default-sized margins without any added border
- write the prescribed title at the start of the essay as stated on the list
- avoid the use of a cover page (with the IB or school logo for instance) as it is superfluous
- take note of the limits of the word requirement for the TOK essay – the actual word-count must be entered when the essay is uploaded.

Unfortunately there were numerous complaints again this session concerning the lack of compliance with the first of these points above. Single-spaced essays create significant and totally avoidable difficulties with the marking – many examiners find them hard to read and they create difficulties with the insertion of comments that aid the assessment process. It is strongly recommended that teachers spread the word that candidates who insist on presenting work in this fashion are doing themselves no favours with examiners.

## Degree and quality of apparent teacher guidance

While it must be recorded that some essays appeared to indicate the input of good guidance from teachers concerning the unpacking of essay titles, many examiners continue to worry about the schism between those candidates who seem to have received too much, or inappropriate, assistance:

- “There were so many essays which were obviously following a taught template, with standard examples.”

- “Quite a few candidates seem to have been guided to write an essay with a canned format: restate the title, define the terms using a dictionary, state a knowledge issue, at some point force in an example from some personal non-academic experience...”

And a larger group of candidates who seem to have been afforded none at all:

- “It was very clear in many instances that candidates had been given no help whatsoever. In such instances, candidates were left to write meandering ramblings which, although personal, had no resemblance to an argument.”
- “Many had only a superficial understanding of the essay question and appeared to be submitting a first draft.”
- “It is a pity that a large number of essays could have scored better marks with some simple suggestions or advice from the teachers.”
- “As with previous sessions, there seemed to be an appalling lack of teacher guidance for the lower quality scripts, with implications about the standard of TOK programmes and instruction in some schools.”

Lack of guidance manifests itself not only in poor essay construction but in many cases prevents the candidates from making the best choice of title at a personal level. Candidates always find some titles superficially more attractive than others, but this initial affinity often turns out to be misleading. While the new programme is for first examinations in May 2015, teachers would do well to read the passage on pages 53 and 54 in the **new** subject guide in order to get a feeling for the degree and type of assistance that is permitted and encouraged.

A number of examiners noted a prevalence of essays this session that leaned heavily toward the minimum permitted word count, as if candidates simply wished to do only just what it takes to fulfil the Diploma requirement for TOK. This is not only disappointing, but exerts a downward pressure on results as it is quite difficult to construct a high-quality essay in only 1,200 words. It is hoped that the removal of the minimum word-count from the requirements in the new programme will encourage future candidates to work towards the maximum figure – which will remain 1,600 words.

One piece of evidence that some schools are not paying enough attention to the changes to TOK (mentioned on page 2 of this report) is provided by the disturbing number of candidates who wrote their essay to a title set for the November 2012 session. The assessment team went out of its way to avoid penalising such candidates on the basis that they were likely to have received bad advice from teachers and schools. However, it is hoped that such errors will not occur in future, as candidates are likely to suffer unfortunate consequences in future sessions.

## Treatment of knowledge issues

Some examiners noted some improvements in this area:

- “In most cases, the candidates appropriately used the prescribed title as the central knowledge issue for the essay.”

- “This session there was quite a heavy shift away from overtly stating knowledge issues in the introduction, to embedding them in the body of the papers. To a large degree papers did actually address knowledge issues, though few papers did so consistently.”
- “I'm finding that more candidates are expressly mentioning knowledge issues. In such instances, the discussion is far more likely to be focused. Too many candidates however, simply restate the prompt in different words, posing this as their solitary knowledge issue.”

While others felt moved to indicate that:

- “Some candidates appeared to have been advised to rephrase the title as a knowledge issue and then focus the essay on that issue. This sometimes resulted in the whole essay being off topic. Candidates should be advised to stick to knowledge issues that are necessary to answer the essay question thoroughly.”
- “The passage from prescribed title to knowledge issues is a hazardous one. The prescribed titles are phrased in a way that is designed to suggest a cluster of immediate knowledge issues that are necessary to tackle as part of an answer to the question. Often candidates are producing knowledge issues that do not sit easily on the line from question to answer and in many cases produced ‘knowledge issues’ that are nothing of the sort. This is still an area that needs a lot of attention.”
- “There were still quite a few candidates who have apparently been coached to insert ‘my next knowledge issue’ followed by a question which is only tangentially related to the title as prescribed. Sometimes this knowledge issue was then dropped altogether (usually a good thing), but sometimes the essay was simply driven off task by these red herrings.”

As noted in the last subject report, it is possible that the explicit presentation of knowledge issues in subject reports over the past few years has contributed to the misunderstandings which are responsible for the problems mentioned above. The intention behind their inclusion was to illustrate by example what good knowledge issues look like, and in the light of the comments above it can be argued that in this respect they have succeeded in contributing to the quality of candidates’ essays.

But the key point now is to ensure that candidates and teachers understand that these knowledge issues, such as those to be found in the section on individual titles below, are questions that could possibly arise within a candidate’s attempt to develop a line of analysis. They might be thought of as stepping stones along the route chosen by the candidate for exploring the prescribed title, but they should never appear to be the origin of the analysis itself – it should always be possible to re-trace the line of development back to the prescribed title.

The consensus among examiners seems to be that some attention has been paid to this problem (and specifically the preceding paragraph expressing it) for this session, but further emphasis is needed to correct it.

Having understood the need for knowledge issues and their connections back to the chosen prescribed title, candidates need to analyse the question. Too often, even the best of knowledge issues are left merely described or presented in a manner that suggests the candidate considers the answers to them self-evident, as if they represented the end of a process of thought, rather than an early stage of it:

- “While candidates extract, recognise and present knowledge issues better each year, they find it difficult to develop discussions about them to any significant depth.”
- “Because knowledge issues are in the form of questions, they tend to become rhetorical in the essays, or they tend to be stated but not developed or answered.”

This limitation is surely partly responsible for the perennial observation among examiners that the lowest scores are to be found in connection with criterion C of the extant assessment instrument. Teachers are encouraged to include explicit opportunities for practising the development of analysis from knowledge issues in their courses.

## Treatment of various ways of knowing and/or areas of knowledge

Coverage of the various parts of the TOK programme revealed some weaknesses and misunderstandings – many of which have been highlighted in previous reports. While there was some convincing evidence that ways of knowing are now being treated more appropriately in connection with each other and with areas of knowledge, some examiners are still not satisfied:

- “Candidates are encouraged, wherever possible, to treat ways of knowing within a context of areas of knowledge (related in particular to criterion A) or supported by concrete examples, in order to avoid treatment in the abstract. Addressing them in isolation or without reference to established knowledge easily leads to anecdotal claims and unsophisticated and unrealistic hypothetical examples which add little to the understanding of learning and knowing.”

And teachers are urged:

- to emphasise that the term “sense perception”, or even merely “perception”, should be used in TOK only in connection to knowledge that is acquired in ways that involve the direct use of the senses. In TOK discourse, “perception” is not a synonym for “perspective” or “point of view”
- to encourage the view that emotion, as a way of knowing, has many positive qualities that can be discussed and is not some sort of “poor cousin” in this category – there are still a significant number of essays that assume that emotion is the antithesis of reason and that this position is self-evident and does not need further discussion or justification.

With regard to areas of knowledge, there are some deep frustrations among examiners with respect to history and the human sciences – namely:

- the conflation of “history” as an area of knowledge with professional historians who are trained to produce knowledge concerning the past, with “the past” itself (e.g. TOK

questions about the role of emotion in history are not soliciting responses about emotion in the past)

- similarly, the conflation of the “human sciences” as an area of knowledge concerned with the understanding of human behaviour, conducted by professional experts in fields such as psychology and economics, with a description of specific human behaviours themselves (e.g. TOK questions about disagreement in the human sciences are concerned with differences of opinion about the nature of human behaviour between professionals in these fields, not about the fact that disagreement is evidently a part of human behaviour)
- the lack of awareness that history is a discipline with methods that are expressly designed to prevent falsehoods and “lies” – methods of which historians are fully aware through their professional training and induction into the community – as one examiner put it: “teachers need to help them understand that pseudo-history (e.g. Holocaust denial, conspiracy theories) is not history just as pseudo-science is not science”
- confusion about the fact that, in the context of TOK, history is an area of knowledge in its own right, and not part of the human sciences (even though it is found in group 3 of the Diploma Programme)
- the cavalier use of the term ‘bias’ in connection with historical accounts without considering that all primary sources engender a perspective which is their strength. To call this bias is deeply misleading. It implies that there is a neutral position from which all historical disputes can be settled. It is worth noting that the view that there is such a position is also a perspective.

Other regular concerns include:

- mathematics continuing to be poorly treated – often with a very limited or erroneous idea of how mathematical knowledge is constructed
- the narrow view that the only appropriate gateway to a discussion on the arts is through emotion
- religion (considered an area of knowledge if treated in a manner amenable to knowledge issues) treated from extreme positions only – either as nonsense or as an area beyond legitimate criticism
- morality discussed without an understanding that there are intellectually respectable ways of approaching ethics (not surprising due to the absence of Ethics HL/SL in the Diploma Programme – candidates need extra assistance in this area). Essays focussing on ethical issues tend to deal with ethical dilemmas and do not consider the knowledge component of the problem. They often result in weak statements of different ethical traditions and make no attempt to synthesize them. The weakest essays are predicated on the assumption that ethics is completely subjective by definition and then candidates get stuck because there is very little one can do with this position



## Use of examples

Examples serve all of the criteria, hence our insistence on their necessity. For instance, in criterion A, examples offer an effective way of creating links and comparisons; in criterion C, justification of arguments may be achieved and counterclaims may be explored successfully by using them; and in criterion D, explanation of concepts may best be attained through illustration. Criterion B specifies the use of examples and that, for the higher levels, they need to be both 'varied' and 'effectively used'. It is important for candidates to be clear on this last point. Examples need to be 'used', not just given, for there to be analysis.

Examiners reported the use of examples from good:

- the better papers clearly had succinct or well-analysed examples, and indeed, ones that the candidate had familiarity with,

to poor – in a number of different respects:

- Hypothetical: "I think we can do better at advising candidates to avoid hypothetical examples, wherever possible. In some essays, the examples took over and the essay turned into a list of loosely related examples. Those candidates should be advised that every example needs to be explicitly linked to the essay question and that the argument should dictate the example used, not the other way around."

Candidates need to be made aware that hypothetical examples almost never work as support for claims made in essays; it should be emphasised that they function essentially as fabricated evidence, and thus cannot lend weight to whatever argument is being offered. Perhaps the only place for them is to illustrate an abstract conceptual distinction in a discussion on ethics.

- Clichéd: "Question 3 saw almost blanket use of Einstein and the nuclear bomb. As always, Newton and his apocryphal apples were not far away."

While some examiners were impressed with the efforts of candidates to reach beyond the commonplace in the examples that they employed, others lamented a lack of diversity in recourse to Hitler, Copernicus, Darwin, Newton, Columbus, Keynes versus the Chicago school, Thompson versus Rutherford, Einstein and Truman. It must be stressed that the problem with such examples is not in the decision to use them; it is when they are treated lazily and without due regard for factual accuracy. Sometimes these examples do not support the claims being made in the essay.

- Anecdotal: "In many cases the use of personal examples tends to be trite. The ethical dilemma of a friend cheating on her boyfriend or girlfriend and whether one should tell or not, etc..."

Candidates need guidance to recognise the kinds of personal examples that are encouraged in TOK – plausible and with clear connections to knowledge.

- Descriptive: "Candidates tend to use examples descriptively; there is clearly an issue of how to structure a TOK paper at play here. Examples tend to be used rather loosely too, without a clear focused point."

This point brings us to the next section.

## Quality of analysis

As mentioned above, performance on the quality of analysis criterion C is often lower than in other domains. This is sometimes due to the aforementioned descriptive deployment of knowledge issues, and sometimes attributable to other factors:

- Balance: “Many candidates have difficulty establishing a clear claim or thesis, and then responding with a relevant counterclaim; rather, they just express an opposing view that may or may not be connected to their argument, and then dismiss it perfunctorily. Most still do not understand what an implication is.”

Sometimes counterclaims are present but expressed poorly, such that they appear to be contradictions rather than explorations of alternative viewpoints. Candidates should take care with the ways in which they introduce such contrasts. Counterclaims should arise naturally from arguments made or evidence presented and they may, for instance, be in the form of different perspectives or alternative evidence which will need to be evaluated.

- Superficiality: “Analysis was often generalized and superficial – therefore, based on unsubstantiated claims. Candidates seemed to rely too often on relativism to provide the basis of an underlying argument or conclusion.”

Weak analysis of this kind tended to be found in the numerous short papers submitted this session.

- Strategic vagueness: “A problem is reliance on ‘many scientists’ or ‘many historians’ or ‘many people’ or ‘many religions’. Particularly common this year was the claim that ‘many have said...’ Candidates should be aware that the reliance on such a sweeping claim suggests that they have no actual facts to point to, and ultimately creates the impression that they are just making stuff up. They will earn much higher marks for incorporating and analyzing an actual example—someone who actually said something, or a scientist who actually wrote something, or a religion which has a particular belief documented in a holy text.”

While the TOK essay is not a research paper, arguments that rest upon particular claims that do not originate with the candidate need a degree of authenticity in order to provide any convincing support.

## Treatment of key terms in titles

It is clear that candidates and teachers often understand the importance of key terms in the prescribed titles, but too often resort to dictionary definitions. This is a perennial criticism:

- “Too often key concepts were defined by the help of a dictionary thus often leading to an inappropriate definition given the context of TOK. Often these definitions were ignored by the writer after providing the clarification.”
- “Candidates (and teachers?) just seem to think that there should be definitions, so they put them in, without understanding that if a definition is necessary, it is because

the candidate needs to frame an answer within the definition provided. This is wasted space and reveals a weak understanding of what the task entails.”

It is emphasized once again that this type of use of the dictionary has the effect of closing down discussion and conceptual analysis just when it is desirable to open them up at an early stage in the essay. Rather than trying to pin down a definition of, say, ‘knowledge’, in a pat sentence in the introductory paragraph of an essay and risking making the rest of the essay irrelevant, it would seem a better strategy to indicate what is understood by the term by giving examples and stating that a closed abstract definition might be outside the scope of the essay. Similarly, using dictionary definitions ostensibly to clarify what is meant by language, sense perception, reason and emotion shows a misunderstanding of these central concepts which should have been considered in depth and specifically as ways of knowing. An example is the problem that arises in Spanish with emotion – the term in English is not equivalent to ‘emoción’ and by applying a dictionary definition emotion becomes an obstacle to knowing rather than a way of knowing.

## Overall crafting of essay structure

It has already been mentioned that many essays this session were very close to the minimum word allowance, with the consequences that arguments were often superficial or unconvincing. Candidates should be encouraged to make as much productive use as possible of the full 1,600 words permitted. However, candidates should be reminded not to exceed this limit, even by one word, because the penalty associated with criterion D (maximum score of 4) will immediately be applied.

A persistent concern is the habit of starting the essay with empty hyperbolic claims about knowledge:

- “Many essays still contain the kind of sweeping generalization that is actually an untrue statement: ‘throughout history man has sought knowledge’ or ‘since the dawn of time man has gotten into trouble because of emotion’ and so on. These statements don’t impede the argument, but they almost always precede an argument which is superficial at best.”

Other comments from examiners focused on the macro-structure of essays:

- “My main advice to candidates would be to make sure it is clear how every paragraph links to the question.”
- “Given that you don’t know what you will end up with until you actually go through the process of writing the paper; it makes sense to write the intro last. So many papers would have been at least a little more effective had this been done.”

And with micro-structure:

- “The issue that causes the candidates the greatest problem is the failure to understand that conjunctive adverbs are not just place holders, but words which establish a relationship between two clauses in a sentence. Over and over I read sentences in which I suspected that the candidate actually simply meant ‘and’, but, not wanting to keep using the same word over and over, instead put ‘thus’, or

‘however’, or ‘therefore’, and ended up with sentences which do not say what the candidate actually meant. This is a devastating problem in an argument, where those causal relationships are absolutely critical to the logic.”

## Factual accuracy and acknowledgement of sources

A few examiners this session complained of inappropriate responses to the requirements for acknowledgements in essays – with some candidates either providing no references at all, or appending vast bibliographies that seemed to bear no immediate relationship to the content of the essay. Candidates and teachers are reminded that references to online sources should include access dates, and that quotations must be linked to references in some conventional manner through citations.

There are now numerous TOK ‘textbooks’ or ‘companions’ available to candidates. It is worth reiterating here that such materials can be useful but candidates should avoid undue reliance upon them in their essays. In particular, many essays refer to these books as a source of examples unfortunately taking precedence over the candidates’ first-hand experience of areas of knowledge during the course of the IB Diploma Programme. Candidates would be well advised to consider their own contact with their Diploma subjects a rich source for detailed exploration of knowledge issues.

In addition, as one examiner wrote, “candidates should be aware that using websites that discuss the prescribed titles is not a good idea. The TOK essay should be an investigation that reflects self-awareness and a personal exploration and not research of what others think about the topic.” Examiners noted the use of such websites in both English and Spanish language this session. In addition to problems with personal voice, there is a real danger that the use of such sites will lead to issues of academic malpractice.

## Feedback on specific titles

As in previous years, candidates appear to have found some prescribed titles much more attractive than others, though quantity did not always correlate to quality, and it is possible that many candidates chose titles without sufficient careful thought. Seven examples of knowledge issues are given for each of the six prescribed titles. As emphasised earlier in this report, it is crucial that knowledge issues such as the examples below should arise naturally within the candidate’s exploration of the prescribed title; not emerge abruptly as stand-alone questions or alternatives to the title itself.

### 1. In what ways may disagreement aid the pursuit of knowledge in the natural and human sciences?

Seven examples of knowledge issues that *could* be addressed in the development of an essay on this title:

- *On what basis should differing views be taken seriously in the natural and human sciences?*
- *Why might there be different amounts of disagreement in the natural sciences and the human sciences?*

- *Why might some ways of knowing be more likely than others to generate and sustain disagreement in the natural and human sciences?*
- *At what stage in the production of knowledge is disagreement helpful to the pursuit of knowledge?*
- *To what extent is disagreement a vital part of scientific methods?*
- *What methods are employed in the natural and human sciences by which disagreement may be converted into consensus?*
- *What might be the consequences of a broad consensus about knowledge within scientific disciplines?*

Although this was a fairly straightforward title, many candidates extended the meaning of ‘disagreement’ to encompass any kind of change. Hence it was often strongly implied that it was the disparity between different theories in the sciences that was the incentive in the pursuit of knowledge, whereas it may just have been the case that investigators, through their investigations, simply came up with a better answer. In the words of one examiner:

- “The most significant problem was that candidates assumed that every change in scientific knowledge must be the result of disagreement. Frequently, for example, the developing model of the atom was offered as an example of how disagreement caused scientific knowledge to develop. This approach implies that disagreement is the driving force of all scientific development, and reveals that candidates do not understand the nature of scientific investigation, which, because findings are tentative, continues in all areas all the time. Disagreement may be a useful mechanism in some instances, but is not a necessary one.”

One difficulty with titles of this kind – which require the candidate to look at events in the past – is that it is difficult to avoid presuming access to what people actually thought at the time, and so once again it is important to show that there is evidence that disagreement was the motivation that moved knowledge onward rather than independent discovery.

**2. “Only seeing general patterns can give us knowledge. Only seeing particular examples can give us understanding.” To what extent do you agree with these assertions?**

Seven examples of knowledge issues that *could* be addressed in the development of an essay on this title:

- *To what extent can we maintain a viable distinction between knowledge and understanding across various areas of knowledge?*
- *Are some areas of knowledge more about knowledge than understanding, and others more about understanding than knowledge?*
- *How can we be sure that general patterns represent genuine features of reality and thus can act as a sound basis for knowledge?*
- *What kind of relationship to an example must we have in order for it to promote understanding?*
- *Why is generalisation seen as very important in some areas of knowledge and does it follow that these areas of knowledge are seen as the most secure?*
- *What roles do the ways of knowing play in giving us knowledge and understanding and how do those roles differ across different areas of knowledge?*

- *Are we as likely to be mistaken in looking for generalisations as in looking for particular patterns and how does that affect our knowledge and understanding?*

The chief difficulty with this title was the need to keep in mind all the concepts it contains, and to parse at least two of them successfully and in a sustained manner.

- “Many candidates struggled to get to grips with the requirements of the question. Hardly anyone successfully dealt with the distinction between knowledge and understanding.”
- “This was not well-handled – possibly because it is quite complex. The title requires candidates to differentiate between general patterns and particular examples, and between knowledge and understanding.”
- “Most candidates made the mistake of trying to assert that it is possible to separate specific examples from general patterns (missing the fairly obvious counter-claim that one cannot establish a pattern without having specific examples to work from), and I don’t think any candidate successfully differentiated between knowledge and understanding. Most commonly, understanding was declared to be the ability to apply knowledge, again ignoring obvious counter-examples: few of these candidates probably understand how their computers generate a word processed document, yet they all managed to apply their knowledge of how to use it to do so.”

### 3. “The possession of knowledge carries an ethical responsibility.” Evaluate this claim.

Seven examples of knowledge issues that *could* be addressed in the development of an essay on this title:

- *Under what circumstances is it possible to maintain a detached relationship with subject matter under investigation?*
- *What knowledge is completely independent of ethical responsibilities?*
- *How can we know when we should be disposed to act on what we know?*
- *If we have decided to act, how can our knowledge guide us as to what to do?*
- *How can we be confident of the ethical responsibilities that may arise from knowing when that knowledge is always provisional or incomplete?*
- *Is there a relationship between the ethical responsibilities of knowing and the ways in which that knowledge is generated?*
- *To what extent does the recognition of the ethical responsibilities of knowing influence the further production or acquisition of knowledge?*

Many candidates struggled allowing their responses to become standard treatments of how to make ethical decisions. Often, well-known ethical theories were paraded – serviced by some well-worn situations, too many hypothetical, from which dilemmas arise. Many were no more than presentations of events that have ethical implications. Some candidates managed to maintain focus upon knowledge itself, but became mired in the difficulty of deciding where the ethical responsibility resided with respect to knowledge and knower:

- “Most candidates also did not trouble to clarify whether they were taking the phrase ‘ethical responsibility’ to mean ‘there is responsibility inherent in the knowledge, whether the knower acknowledges it or not’ or ‘the knower accepts responsibility and

acts responsibly.’ Many candidates appeared to wander freely between the two interpretations without realizing or acknowledging that they were doing so. This made for papers which were quite confusing and often contradictory.”

There was overwhelming reliance on the example of Einstein’s scientific work and its application in the ending of WWII in Asia, and, as elsewhere, examiners complained of a lack of balance:

- “The candidates did not typically settle for evaluating issues; they chose a side and asserted that someone acted ethically or did not or should have or should not have acted as they did. This not only shows a rather lot of hubris; it also dodges the question in the prescribed title which has to do with investigating whether knowledge carries responsibility and not with deciding what specific actions are considered to be ethical.”
- “The major problem was simplistic and flat analysis. Many papers on this topic were in the 1200-1300 range and were riddled with commonplace examples and opinions rather than analysis.”
- “On the whole, candidates did not address the connection between knowledge and responsibility. There was a marked reluctance to examine what ‘ethical responsibility’ meant and what it was about the possession of knowledge that produced it.”

Responses to this title also showed evidence of common approaches, with frequent reference to quotations from Bacon (knowledge is power) and Voltaire (with great power comes great responsibility). These sayings were usually dropped as quickly as they were seized upon, and proved ineffective as starting points for analysis.

**4. The traditional TOK diagram indicates four ways of knowing. Propose the inclusion of a fifth way of knowing selected from intuition, memory or imagination, and explore the knowledge issues it may raise in two areas of knowledge.**

Twelve examples of knowledge issues that *could* be addressed in the development of an essay on this title:

- *Under what circumstances can intuition alone be accepted as a justification for a knowledge claim?*
  - *Is there any knowledge that is accessible only through intuition?*
  - *If intuition does not involve conscious reasoning how can it ever be supported by evidence and how can it be evaluated or contradicted?*
  - *How can we tell the difference between intuition and fiction?*
- 
- *To what extent is memory a mental agent that is involved in actively shaping our knowledge?*
  - *Can we know anything through the activity of memory alone?*
  - *How can we know whether to rely upon memory as a way of knowing?*
  - *Does it make sense to speak of collective memory, and, if so, how might the knowledge involved in it differ from that of an individual?*

- *To what extent does imagination play a role in connecting knowledge across established disciplines?*
- *To what extent is it helpful to think of imagination as an extension of the powers of sense perception?*
- *Does imagination expand the field of knowledge or merely add to the field of conjecture?*
- *How can imagination be a way of knowing if it merely proposes possibilities?*

A recurring problem in this title was the reluctance of many candidates to define their chosen way of knowing. Imagination and intuition in particular were treated as though there was a common understanding about what was meant by these terms. The lack of a working definition produced essays that wandered and lacked focus, or that were vacuous. Imagination was confused with creativity and even intuition. Intuition was assumed either to be completely innate or completely the result of experience. There were very few essays that took time to examine these issues.

The usual problems with ways of knowing surfaced in some essays. Candidates concentrated on them in an abstract way related only to first-person autobiographical knowledge without linking them to the methods employed by areas of knowledge. The few essays that did examine the role of the chosen way of knowing in the methods of inquiry of an area of knowledge, almost always concluded that in some cases it was useful but in others it wasn't without producing any general conclusions about what was responsible for the difference in these cases. The tendency was to identify instances of memory, intuition or imagination in areas of knowledge, which might be a good start, but not then to explore them as ways of knowing.

**5. "That which can be asserted without evidence can be dismissed without evidence." (Christopher Hitchens). Do you agree?**

Seven examples of knowledge issues that *could* be addressed in the development of an essay on this title:

- *When does the burden of supporting a knowledge claim lie with the claimer and when with the appraiser?*
- *Do all knowledge claims require evidential support?*
- *How can we know when to suspend judgement on a knowledge claim?*
- *What counts as evidence? Does this vary from one area of knowledge to another?*
- *Are there areas of knowledge in which the support for knowledge claims is not provided in the form of evidence?*
- *Do all ways of knowing provide evidence for knowledge claims?*
- *Under what circumstances might it be sensible to accept knowledge claims in the absence of evidence?*

This title makes a claim about the burden of proof in justifying or denying knowledge claims. Candidates were required to justify an asymmetry with an argument that appeals to the types of procedures used to establish knowledge claims in various areas of knowledge. Very few actually examined the way in which knowledge claims are supported or rejected in actual



examples of areas of knowledge. Most assumed symmetry on *a priori* grounds without appealing to actual practice. These essays tended to be philosophical in nature and the key ideas were often handled clumsily.

The best essays examined the requirement for some untestable assumptions on which areas of knowledge such as the natural sciences rest. These then took the view that some claims did not have to be dismissed without evidence if they were claims that supported, for example, the validity of the experimental procedures of science. But even these essays ran into trouble when it came to justifying a distinction between the sorts of claims that could not be dismissed without evidence from those that could.

Some papers opened with a long series of definitions. Many candidates treated "evidence" exclusively in connection with court cases and the law, which limited the scope of the examples and the analysis.

Perhaps because Hitchens had such a high public profile in recent years, many candidates writing on this title ignored the general instructions on the list of prescribed titles to accept any quotations as they are, without focussing on their origins. With this title in particular, many candidates decided to follow the (albeit correct) assumption that Hitchens was referring to atheism, and restricted their responses accordingly to this field.

**6. Can we know when to trust our emotions in the pursuit of knowledge? Consider history and one other area of knowledge.**

Seven examples of knowledge issues that *could* be addressed in the development of an essay on this title:

- *Are there universal emotional responses to some situations that we can all trust as a result? Can shared knowledge be established upon this basis?*
- *To what extent is it legitimate to evaluate the trustworthiness of emotions in terms of other ways of knowing?*
- *If you cannot feel emotion about something you don't know about and you can't know about something without emotion, does this mean that we are bound to trust our emotions in the pursuit of knowledge?*
- *If trust is inextricably bound up with emotion itself how can it be used legitimately to evaluate emotions?*
- *It has been claimed that a good historian cannot be neutral. If this is so, could the same be said of the providers of knowledge in other areas?*
- *If some emotions are instinctive, and others social, which are more likely to be trustworthy?*
- *Can emotions play a positive role in guiding us towards effective methods for the production and acquisition of knowledge?*

This was a very popular title, but one with a number of substantial difficulties ingrained in it – causing somewhat of a 'perfect storm'. These difficulties arose from the wording of the title itself and from some misunderstandings that are widespread in TOK candidates:

- in addition to asking when can we trust our emotions in the pursuit of knowledge – itself a knowledge issue – the title required the candidate to consider how we can know the answer to that question ‘in advance’, so to speak
- the focus on emotion enticed candidates to focus only on forms of knowledge which they considered weak or unverifiable, which fed into the following pervasive misunderstandings about history...
- some candidates took “history” to mean “the past” and wrote about what emotions were like in some other period of time (see section on treatment of areas of knowledge) – even many candidates who recognised the necessary distinction found it difficult to remember to sustain it
- the extraordinarily popular view of historians as liars, twisters, irredeemably “biased” people (again, see section on areas of knowledge) seemed to many candidates tailor made for a discussion of the “dangers of emotion” as an enemy of truth.

Some examiners went even further in their comments on responses to this title:

- “Sometimes, candidates offered themselves as historians (‘when I was writing my Extended Essay, I let my emotions blind me to X, Y, and Z’) and then extrapolated that professional historians must do the same thing. I found this inability to differentiate between professionals and candidates and charlatans disturbing as it suggests that candidates are not being exposed to the area of knowledge of history as we wish them to be.”

It is clear that a combination of the formulation of the title and the predilections of the TOK candidature led to some weak responses to this title.

## Section 2: Presentations

### Component grade boundaries

The boundaries remained unchanged for this session.

<b>Grade:</b>	E	D	C	B	A
<b>Mark range:</b>	0-8	9-12	13-15	16-18	19-20

**Once again we request that teachers be reminded of their fundamental role in guiding candidates towards success in the oral presentation assessment task. All teachers, whether new or experienced, should read the comments below in order to ensure that their candidates have a clear understanding of the nature of the TOK presentation. Although several of the comments below have been made before they are being repeated because verifiers have noted similar weaknesses in the presentations they have viewed this session to those evident in previous sessions. All teachers are also**

**urged to study the guidelines found in the current TOK subject guide and to read the advice given in previous reports.**

## Administrative and clerical procedures

As is the norm, about 5% of the schools entering candidates were asked to record some or all of the TOK presentations given by candidates for the purposes of confirming the scores awarded by teachers for this internally assessed component of the programme. Some of these schools were selected at random; others were selected on the basis of major inconsistencies in past sessions between performance in the essay and the presentation.

Schools selected for any given examination session are notified via the DP Coordinator by IB Assessment Centre at the start of the diploma cycle that culminates in that session. For example:

- schools selected for the November 2013 session **will have been** notified by **March 2012**
- schools selected for the May 2014 session **will have been** notified by **September 2012**
- schools selected for the November 2014 session **will have been** notified by **March 2013**
- schools selected for the May 2015 session **will have been** notified by **September 2013**

Notification is given very much in advance to allow schools flexibility regarding their timing of recordings. This also means that schools need to ensure that they have made note that they are required to record their presentations. There have been cases of schools that have not remembered to do so.

Schools that have been asked to provide presentations for verification must observe the requirements which are outlined in the Appendix to this report. However, there are too many schools which do not follow these requirements. Schools are asked to send five presentations only. All too often the presentations for the entire cohort are sent. As one verifier said “several schools, where there were group presentations, sent paperwork for every candidate in the group instead of just one, so I often got 12-20 sets of paperwork for five videos.” Another verifier complained that “one school sent paperwork for 50 candidates and DVDs for 23 who were not clearly identified”. **It is essential to note the requirements for sending material to verifiers – please read carefully the instructions in the appendix to this report.**

There were fewer instances of presentations which were read in their entirety, or in large part, but it is still happening. Teachers are reminded that presentations may not be read. **If candidates start reading extensively, the teacher should stop the presentation and ask them to prepare it properly and present it on another occasion.**

## TK/PPM form

There is **one** form to fill in for the presentation which is the **TK/PPM form (presentation planning and marking form)**. It is important that the TK/PPM form is correctly completed, and not just for procedural reasons. The ‘presentation planning’ part of the form is intended to help candidates by guiding and structuring their planning and must thus be completed **before** the presentation. It requires candidates to state the title of the presentation and then to answer three questions which refer to:

1. the **real-life situation**
2. the **knowledge issue** that has been identified as arising from the real-life situation, expressed as a question
3. a **plan** of the presentation (it is recommended that this includes the candidate’s presentation in diagrammatic form using the presentation structure below as a guide).

The reverse side of the form is the “marking form” and requires the following:

- the **self-assessment** of the **individual candidate**
- the **candidate’s signature and date**
- the **assessment by the teacher**
- the **teacher’s name, signature and date**
- the **duration of the presentation** in minutes.

There is space for a one-line comment/justification for each criterion to be followed by the respective mark. The comment/justification should not just be a repetition of the descriptor for that grade but offer a very brief indication of why that level was awarded in terms of that particular presentation.

## Assessment issues

The presentation is supposed to be an integral part of the TOK course with the aim of giving candidates an opportunity to consider a topic in depth, explain their perspectives and recognize and develop knowledge issues. It complements the essay as it helps candidates realize what they know, what their perspectives are and how valid their justifications may be. While the presentation is a formal *summative* assessment requirement for TOK, it is also intended as a *formative* opportunity for candidates to contribute a meaningful lesson to the TOK course in which they are participating. It is thus recommended that, if possible within the constraints of the school’s TOK course, candidates do more than one presentation.

Too many candidates wrongly seem to understand the TOK presentation as being a platform for debate on contentious topics. Additionally, many of the presentations viewed are largely descriptive and the intention seems to be to give information to the audience on a topic and then to list or to identify positions without critical engagement. This approach probably results from candidates failing to identify effective knowledge issues around a real life situation. It is important that candidates understand that the real life situation is not *the* focus of the

presentation but is a base for exploring and considering larger issues or questions of knowledge.

A concrete **real** life situation must therefore be the starting point from which a single knowledge issue (not multiple ones) may be extracted. Some schools are not using the TK/PPM form to guide candidates in their planning to the extent of there being instances of confusion regarding the difference between a real life situation and a knowledge issue.

The real life situation may come from anywhere but it best comes from the candidate's real experience or contact with the outside world and is a topic of interest to the candidate. It may, therefore, include films or works of fiction. However, current events or classroom learning, for instance, may offer better concrete situations for candidates to tackle. The real life situation should not be a broad topic, but one "real life situation". When candidates choose very broad topics such as 'abortion', 'same-sex marriage', 'polygamy', 'ethics', 'art' or 'beauty' they are unable, as one verifier put it, "to hone in on a real world moment in which real people have real knowledge or beliefs which can be analyzed". Such topics lead to sweeping generalizations as well as to hypothetical examples and bold, unjustified claims.

It is strongly recommended, therefore, that teachers encourage candidates to choose a concrete real life situation rather than an abstract or vague one. They can be helped by being told to ask basic *who, what, how, when, where* questions on their topic such as "who was involved in this situation?", "what happened?", "when did it happen?" and in that way they will have something constrained for analysis. Rather than have 'euthanasia' as a real life situation (for which you cannot answer *who, what, how, when, where* questions) candidates should be evaluating the controversy over a specified legal decision and its consequences.

The real life situation will refer to a knowledge claim, whereas the knowledge issue needs to be expressed as a question. By expressing the knowledge issue as a question candidates are more likely to see that an analytical response to the knowledge issue is what is required, rather than a passive description of the real life situation.

Candidates also need guidance in the expression of the knowledge issue, and, already in this report, teachers have been directed to the 'Understanding Knowledge Issues' document on the OCC and its use in the classroom has been recommended. Candidates should be given the opportunity to study and discuss the contents of the document so that they can see the extra quality of good knowledge issues and try to emulate them.

## Comments on candidate performance against each criterion

**Criterion A** – in many cases a suitable knowledge issue was identified, although at times the real life situation was neither always explicit nor real. When there is no clear real life situation it is not possible to tell whether the knowledge issue is relevant or not. Additionally, all too often the 'knowledge issue' that was 'identified' was not really a knowledge issue. Another problem noted by verifiers was the identification of a knowledge issue which was not relevant to the chosen real life. Candidates need to be reminded by their teachers that criterion A requires the identification of a knowledge issue in the singular and that it is the main knowledge issue. During the course of the presentation other knowledge issues will be considered which branch from this main knowledge issue. A good knowledge issue will be applicable to a wider range of situations than simply the one chosen.

**Criterion B** – a few presenters were able to show adequate understanding of knowledge issues, but seldom reached the ‘good’ level. Many presenters considered the knowledge issues from the perspective of various areas of knowledge and ways of knowing which tended to be a formula which worked well to introduce perspectives but did not necessarily provide depth in the analysis. In cases where the real life situation or the knowledge issue was missing, it was not possible to evaluate the knowledge issue within the context of that situation.

**Criterion C** – there was usually an attempt to show personal involvement but this was understood by candidates as asserting their opinions on the matter (for example, “I believe that testing on animals is wrong” or “I believe that same-sex marriage should be legal”). One could see an effort to attend to this criterion but without a proper understanding of what is required. This criterion does not seek the candidate’s personal opinion but rather the candidate’s ability to analyze and to be genuinely engaged in the topic from a knowledge perspective. The significance of the topic is rarely made explicit. As the presentation structure diagram below shows, there should also be an attempt to apply the knowledge issue to another real life situation in an effort to show its significance.

**Criterion D** – due to the fact that many candidates did not have a real or concrete real life situation, they were unable to analyze different perspectives in an appropriate way. Even where there was a real life situation, the ability to approach the question from different angles eludes many candidates for they understand that as a request to express opposing views. Consideration of similarities and differences in related areas too often becomes a tour of ways of knowing or areas of knowledge. This is evidently not a way to establish connections or see implications in related areas. Areas of knowledge or ways of knowing ought to be integrated within a presentation.

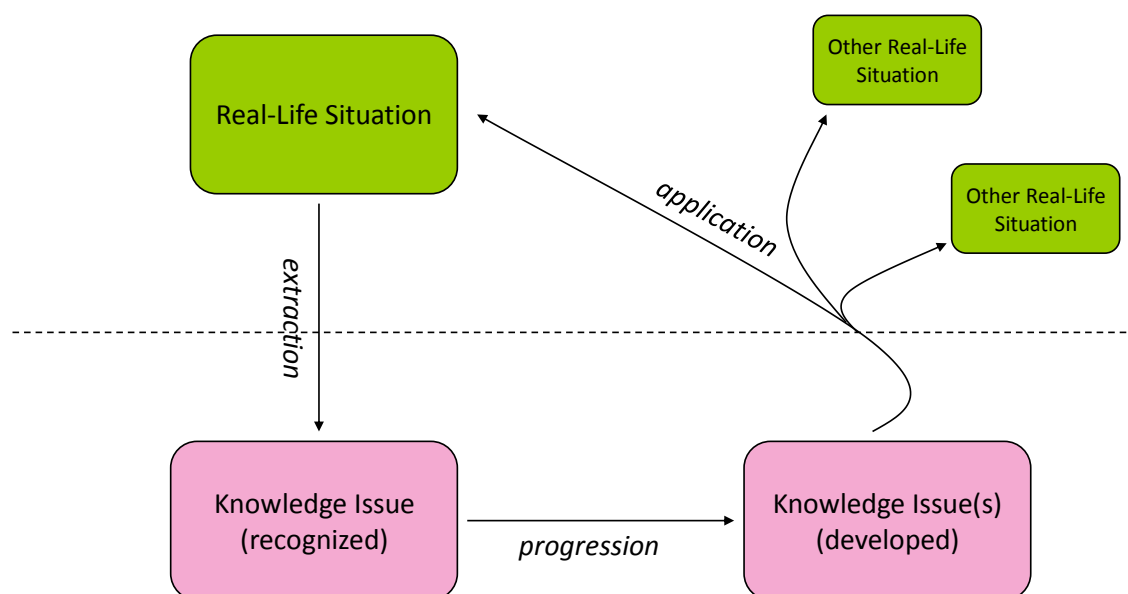
## General comments

In summary, **the TOK presentation is NOT a descriptive research project; it is NOT a “report” or “monograph” on some subject of general interest.** Such reports belong to history, psychology or sociology classes. Without a focus on knowledge issues, presentations cannot deserve major credit on the assessment criteria (criteria A and B are almost certain to score zero for research projects, and a very low mark for D is very likely). They *can* be very good *presentations*, but are very poor *TOK presentations*.

Regrettably it would seem that the reason for so many poor TOK presentations is that candidates have not been guided well by their teachers. Most presentations seem to have been well prepared by candidates but their efforts have been misguided. Verifiers saw presentations with high quality PowerPoint slides, where a number of sources had been researched, and with clear cue cards, which received inappropriately high marks from their teachers even though they were descriptive research projects rather than TOK presentations.

It is sad to see candidates trying so hard but suffering because the nature of the task is so clearly misunderstood. The TOK presentation is supposed to focus on analysis, not description, and, in order to do this, a real life situation must be connected to a knowledge issue. Thus, the core intention of the TOK presentation essentially takes the form of an analytical dialogue between two levels of discourse as illustrated by the following diagram:

## Theory of Knowledge: Presentation Structure



The two levels represent the candidates' experiences in the TOK course (lower level) and in the world beyond it (upper level), and the connection between the levels demonstrates the relevance of TOK to life beyond the TOK classroom.

At the “real world” level, we have the real-life situation from which a knowledge issue corresponding to criterion A) must be **extracted**. This knowledge issue, residing in the “TOK world”, must be **developed** using ideas and concepts from the TOK course, and in this **progression** it is likely that other related knowledge issues will be identified and will play a part in taking the argument forward. The product of this reflection can then be **applied** back to the real-life situation at the “real world” level. In addition, the presentation should be able to show how the process of application extends beyond the original situation to others, thus demonstrating why the presentation is important and relevant in a wider sense.

The following pairs of real life situations and knowledge issues are intended to illustrate the sort of relationship that can be constructed between them.

**Real life situation:** Attempted assassination of Pakistani girl Malala Yousafzai for promoting girls' education.

**Knowledge Issue:** Why do we need a tragedy before we act on knowledge that we have?

**Real life situation:** Renaming of cities in India

**Knowledge Issue:** To what extent do labels affect our perception?

**Real life situation:** Article on climate change

**Knowledge Issue:** To what extent is a scientific explanation more convincing than other types of explanation?

**Real life situation:** UN warns of looming food crisis in 2013

**Knowledge Issue:** How do we know what is a fact?

**Real life situation:** Bullfighting ban in Catalonia

**Knowledge issue:** How can we know when a tradition should be upheld?

**Real life situation:** The Ekeko amulet of the Andean Altiplano believed to bring monetary wealth to its worshipper.

**Knowledge Issue:** Why do people hold beliefs for which there is no evidence?

**Knowledge issue:** Wiki Leaks and the publication of secret information and news leaks.

**Knowledge issue:** To what extent is emotion a better guide to what is ethical than reason?

**Real life situation:** Salvador Dalí, an eccentric person

**Knowledge Issue:** To what extent does it matter to know about an artist to understand his or her art?

It is hoped that the recommendations given in this report will serve to guide schools towards better presentations. We commend schools who take this assessment task in the spirit in which it is intended and which have produced presentations where candidates have engaged knowledge issues effectively through real life situations.

There are other aspects of the TOK presentation that deserve reiteration:

- A presenter turning his or her back on the audience in order to read large quantities of text from a projector is not delivering material in a manner consistent with the intentions of the task – this approach is equivalent to reading from notes and so the



same procedure should be followed – i.e. the teacher should stop the presentation and the candidate(s) restart properly on another occasion.

- The presentation must be a live experience with the intended *formative* opportunity for candidates to contribute a meaningful lesson to the TOK course. Therefore the presentation must not be filmed by candidates at home or in another setting, nor be edited.
- The use of movie and YouTube clips must similarly be subordinated to the overall aims of the presentation and not be used as substitutes for thinking and analysis
- The duration of the presentation should be recorded and entered onto the TK/PPM form – timings should be compatible with the recommendations given in the current TOK subject guide on page 47
- Just as good writing enhances the clarity and persuasiveness of an essay, good speaking skills, while not part of the formal assessment, can enhance a presentation. Material that cannot be heard clearly cannot attract credit and cannot contribute to understanding
- The principles of academic honesty must be observed and the need for acknowledgement recognized even in the oral context of the presentation

## Appendix

### Mandatory requirements for schools selected for verification of presentations.

Selected schools are required to submit (by 15<sup>th</sup> September for November sessions, and 15<sup>th</sup> March for May sessions) materials for **five candidates** (or all candidates if the school is registering fewer than five in total). These materials comprise:

- **recordings of the presentations in which these five candidates were involved, and**
- **the TK/PPM forms for those five candidates**

To clarify further:

- **a TK/PPM must be included in the documentation for sampled candidates ONLY**

The selection of the five candidates is at the discretion of the school, but should as far as possible reflect the diversity of assessment scores awarded for presentations. For this reason, schools must not include more than one candidate from the same presentation in the sample unless a small overall number of candidates makes this inevitable. It is recognized that scores cannot be known in advance of the presentations themselves, and so it may be necessary to record more presentations than will actually be sent to the verifier in order to be

sure of capturing evidence for the range of scores required. Many teachers have found that the recording of all presentations in any case has contributed to good practice for subsequent sessions, as these recordings can be helpful during the process of presentation preparation.

**Schools are required to send recordings in DVD or USB format only.**

DVDs should be sent clearly labelled (examination session, candidate session numbers where known, titles of presentations in correct order) and packaged such as to avoid damage in transit (e.g. bubble-wrap or padded envelope). Particularly important is the quality of sound on the recording, and teachers are strongly advised to check this before commencing the actual recordings of the presentations. The quality must also be checked after recording each presentation to ensure there have been no problems. If visual projections form an important part of the presentation, it should be ensured that they are readable on the recording.

As the verification of presentation assessment is on the basis of individual candidates, even if they participated in group presentations, **it is vital that verifiers can identify the candidates being sampled**. Candidates should announce clearly and slowly their identity on the recording at the start, including names (and candidate numbers if known at the time the presentation is given). Schools may consider asking candidates to hold up cards with this information at the start of the recording in order to facilitate this. Teachers should also ensure that recordings start well in advance of the presentation.